Peer review Group 4

immediate

March 21, 2023

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1 HW1 of group 1

HW1.1 Everything is good.

HW1.2 Everything is good.

HW1.3 Everything is good. The definition of convergence rate is well-defined. Besides, it additionally provides two proofs for the convergence rate of gradient descent for convex smooth functions and strongly convex smooth functions. Well done.

HW1.4 See our GITHUB page.

2 HW2 of group 2

HW2.1 See our GITHUB page.

HW2.2 Everything is good.

HW2.3 For one step, the detailed proof is omitted: "we use the approach in references and look at". Otherwise, everything is fine.

3 HW3 of group 3

HW3.1 It directly uses some properties of conjugate functions without proving it or some notations. But the method I think is correct.

HW3.2 See our GITHUB page.

HW3.3 I am not sure if the designed algorithms are correct. Based on the designed algorithms, the claims about communication costs and convergence rate make sense.

4 CA1 of group 1

See our GITHUB page.

5 CA2 of group 2

MATLAB and Python version makes it confusing. ipynb file seems fine.

6 CA3 of group 3

Everything is good. Two datasets are considered.
Codes are clearly written.

All the algorithms are correctly designed and coded.
The simulation results of all the algorithms illustrate the advantages of all the algorithms.
The only drawback is to forget to compare the convergence time of all the algorithms (the x-axis is about the running time).